

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : MITSUBISHI CHEM CORP

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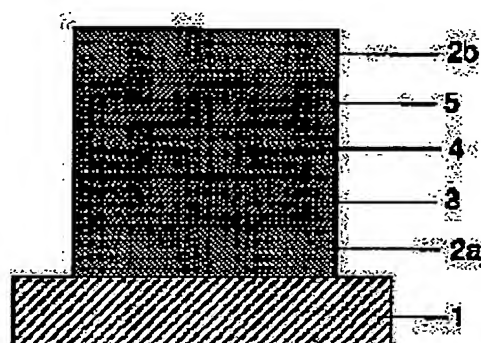
(72)Inventor : SATO YOSHIHARU

## (54) ORGANIC ELECTROLUMINESCENCE ELEMENT

## (57)Abstract:

**PURPOSE:** To maintain the stable white luminescence characteristic over a long period by laminating a blue luminescence layer and a green luminescence layer in sequence from a positive hole transportation layer side on an organic luminescence layer, and providing a region containing a red fluorescent dye on the green luminescence layer.

**CONSTITUTION:** Conducting layers 2a, 2b and a positive hole transportation layer 3 are provided on a substrate 1, and an organic blue luminescence layer 4 is provided on the layer 3. The layer 4 is made of a compound capable of efficiently transporting the electrons implanted from a cathode in the direction of the layer 3 between electrodes applied with the electric field. The compound having high electron implantation efficiency from the layer 2b and capable of efficiently transporting the implanted electrons is used for the layer 4. An organic green luminescence layer 5 is provided on the layer 4, and a compound having high electron implantation efficiency from the layer 2b and capable of efficiently transporting the implanted electrons is used for the layer 5 like the material used for the layer 4. A region containing a red fluorescent dye is provided on the layer 5.



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